Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address*: **James S. & Anne M. Merrill**
8560 N Montana Ave
Helena MT 59602 8320

2. *Type of action*: **Application for Beneficial Water Use Permit No. 41I-30022964**
Well Location: 8560 N Montana Ave

3. *Water source name*: **Groundwater Well**

4. *Location affected by action*: **NESENE, Sec 6, Twp 11N, Rge 3W, Lewis & Clark Co**

This well is located within the boundary of the North Hills Controlled Groundwater Area (NHCGWA).

5. *Narrative summary of the proposed project, purpose, action to be taken, and objectives*:
This application proposes to appropriate groundwater using a one hp pump from a 120-foot deep, 4-inch cased well located in NESENE, Sec 6, Twp 11N, Rge 3W, Lewis and Clark County at a rate of 15 gpm up to 1.63 acre-feet per year. A licensed well driller drilled the well in September 1995. The water is used yearly for domestic use from January 1 to December 31 and for ¼- acres of lawn and garden from April 1 to October 31. The place of use is the NESENE, Sec 6, Twp 11N, Rge 3W. This well has been in use since 1995, but the water rights had been filed on, but were terminated due to non-compliance.

The DNRC shall issue a water use permit to the applicant if the criteria in 85-2-311, MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

No agencies with overlapping jurisdiction.

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: **This project does not seek to develop water from a surface water source.**

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: **This project would not affect water quality in perennial streams. See groundwater section below.**

Groundwater *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: **At the requested flow rate of 15 gpm and volume of 1.63 acre-feet, there should be no significant impacts to water quantity or quality. The well has been continually used since 1995 with no adverse impacts.**

The water permit, if issued, would require the well owner to submit an annual water sample to be tested for coliform bacteria, chloride, and nitrates. The well has been grouted with bentonite to avoid well contamination.

DIVERSION WORKS *- Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: **This project would not adversely affect channel impacts, flow modifications, barriers, riparian areas or dams, as it would be utilizing groundwater at a rate of 15 gpm. There are no perennial streams located on or near the site. The well was completed in September 1995 by a licensed well driller. The 120-foot deep well incorporates a 4-inch casing and is grouted with bentonite to avoid well contamination.**

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: **This project would not significantly impact any threatened or endangered or species of special concern.**

Wetlands *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: **No known wetlands exist in the area.**

Ponds *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: **This project does not involve any pond development.**

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: **No significant impact to the degradation of soil quality, alteration of soil stability or moisture content is anticipated. This is a well that has been in existence since 1994.**

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: **No significant impact. This is an existing well. There would be no new disturbance to vegetative cover. The landowner is responsible for weed control management on the property.**

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: **There should be no significant deterioration of air quality.**

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: **No significant impact. Since this project is located on private property, the decision to conduct a cultural resources survey would be at the discretion of the owner.**

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: **No impacts on environmental resources of land, water, and energy not already addressed were identified.**

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: **No significant impact to any locally adopted environmental plans and goals is anticipated. This project lies within the boundary of the North Hills Controlled Groundwater Study Area.**

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: **This project would not impact access to or the quality of recreational and wilderness activities.**

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: **There should be no significant impacts on human health.**

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
Yes___ No_X_. If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? **No significant impact.**

(*b) Local and state tax base and tax revenues?* **No significant impact.**

(c) (c) Existing land uses? **No significant impact. The land use remains the same. This is an existing development.**

(*d) Quantity and distribution of employment?* **No significant impact.**

(e) Distribution and density of population and housing? **No significant impact.**

(f) Demands for government services? **No significant impact.**

(g) Industrial and commercial activity? **No significant impact.**

(h) Utilities? **No significant impact.**

(i) Transportation? **No significant impact.**

(j) Safety? **No significant impact.**

(k) Other appropriate social and economic circumstances? **No significant impact.**

2. ***Secondary and cumulative impacts on the physical environment and human population:*** This project requests a minimal amount of water for a single household. No significant secondary or cumulative impacts were identified.

This application is for a minimal domestic use under 35 gpm and 10 acre-feet within the North Hills Controlled Groundwater Area. The sole purpose of the control area designation is to gather data to assist in the analysis and study of water quantity and quality problems within the temporary control area. The purpose of the study is to try to identify properties within the area where water may be available for appropriation without affecting existing users or properties where additional water development may impact existing users and to determine if there should be a permanent controlled groundwater area designation. The decision for the temporary control area was not to control development or deny the smaller domestic wells.

3. ***Describe any mitigation/stipulation measures:*** If a permit to appropriate water is issued for this project, it would be subject to all prior existing water rights in the source of supply and the terms and conditions of the NHCGWA.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The no action alternative would prevent the applicant from obtaining a water right for the domestic water supply.

PART III. Conclusion

Based on the significance criteria evaluated in this EA, is an EIS required? **No.**

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: **An EA is the appropriate level of analysis for this action. No significant impacts from the well for this household has been identified, therefore, an EIS is not required.**

Name of person(s) responsible for preparation of EA:

Name: Kathy Arndt
Title: Water Resources Specialist
Date: July 10, 2006